

**IN THE CLAIMS**

The following is a complete listing of the claims, which replaces all previous versions and listings of the claims.

1. (previously presented) A patient support system for a medical imaging system, comprising:
  - a lateral rail structure attachable to a receptor of the medical imaging system; and
  - a patient support movably coupled to the lateral rail structure via a rail guide structure, wherein the rail guide structure is releasably coupled to the lateral rail structure via a releasable latch.
2. (original) The patient support system of claim 1, wherein the lateral rail structure has a curvilinear path.
3. (original) The patient support system of claim 2, wherein the curvilinear path is convex.
4. (canceled)
5. (original) The patient support system of claim 1, wherein the patient support is positionally securable along the lateral rail structure via a friction-based mechanism activated by a patient load applied to the patient support.
6. (original) The patient support system of claim 1, wherein the patient support is continuously movable and securable along the lateral rail structure.
7. (original) The patient support system of claim 1, wherein the patient support is a patient limb support.

8. (original) The patient support system of claim 1, wherein the patient support is a patient extremity support.

9. (original) The patient support system of claim 8, wherein the patient support is adapted to position patient extremity in a non-obstructive location relative to the receptor.

10. (original) The patient support system of claim 1, wherein patient support comprises a plurality of hand grips.

11. (original) The patient support system of claim 10, wherein the plurality of hand grips are disposed at different vertical positions.

12. (currently amended) A patient support for an imaging system, comprising:  
a curvilinear rail structure attachable to, and movable with, a radiographic receptor of the imaging system; and

a limb support slidingly coupled to the curvilinear rail structure, wherein the limb support is continuously movable and securable along the curvilinear rail structure.

13. (original) The patient support of claim 12, wherein the curvilinear rail structure has a convex path.

14. (original) The patient support of claim 12, comprising a releasable latch structure coupling the limb support to the curvilinear rail structure.

15. (original) The patient support of claim 12, wherein the limb support is positionally securable along the curvilinear rail structure via a holding mechanism activated by weight of a patient limb supported by the limb support.

16. (canceled)

17. (original) The patient support of claim 12, wherein the limb support is adapted to position a patient limb in a non-obstructive location relative to the radiographic receptor.

18. (original) The patient support of claim 12, wherein limb support comprises a hand grip.

19. (original) The patient support of claim 12, wherein limb support comprises a wrist support.

20. (original) The patient support of claim 12, wherein the limb support comprises a plurality of lateral support members disposed at different vertical positions.

21. (previously presented) A medical imaging system, comprising:  
a radiographic receptor;  
a rail structure coupled to the radiographic receptor; and  
a patient extremity support slidingly coupled to the rail structure;  
wherein the rail structure has a curvilinear path; and  
wherein the patient extremity support tiltingly slides along the rail structure with the curvilinear path.

22. (original) The medical imaging system of claim 21, wherein the radiographic receptor is a digital detector assembly.

23. (original) The medical imaging system of claim 21, wherein the radiographic receptor is coupled to a positioning system.

24. (original) The medical imaging system of claim 21, wherein the rail structure is coupled to an upper rear portion of the radiographic receptor.

25. (canceled)

26. (previously presented) The medical imaging system of claim 21, wherein the curvilinear path is convex.

27. (canceled)

28. (original) The medical imaging system of claim 21, comprising a releasable latch structure coupling the patient extremity support to the rail structure.

29. (original) The medical imaging system of claim 21, wherein the patient extremity support is frictionally securable along the rail structure via a holding mechanism activated by weight of a patient extremity supported by the patient extremity support.

30. (original) The medical imaging system of claim 21, wherein the patient extremity support is movable in infinitesimal increments along the rail structure.

31. (original) The medical imaging system of claim 21, wherein the patient extremity support is adapted to position a patient limb in a non-obstructive location relative to the radiographic receptor.

32. (previously presented) A method of supporting a patient limb during image acquisition by a medical imaging system, comprising the acts of:

sliding a limb support along a rail structure directly coupled to, and movable with, a radiographic receptor of the medical imaging system; and

securing the limb support in a desired position along the rail structure.

33. (original) The method of claim 32, wherein the act of sliding the limb support along the rail structure comprises the act of sliding the limb support along a curvilinear path.

34. (original) The method of claim 33, wherein the curvilinear path is convex.

35. (original) The method of claim 32, wherein the act of sliding the limb support along the rail structure comprises the act of moving the limb support in infinitesimal increments.

36. (original) The method of claim 32, wherein the act of securing the limb support in the desired position comprises the act of frictionally securing the limb support.

37. (original) The method of claim 36, wherein the act of frictionally securing the limb support is activated by performing the act of supporting the patient limb on the limb support.

38. (original) The method of claim 32, wherein the act of securing the limb support in the desired position comprises the act of positioning a patient limb in a non-obstructive location relative to the radiographic receptor.

39. (currently amended) A method of forming a laterally adjustable limb support for a medical imaging system, comprising the acts of:

providing a lateral rail structure attachable to a receptor of the medical imaging system wherein the lateral rail structure has a curvilinear path;

providing a friction-based securement mechanism to secure the limb support at a desired position along the lateral rail structure; and

slidingly coupling a limb support to the lateral rail structure.

40. (canceled)

41. (previously presented) The method of claim 39, wherein the curvilinear path is convex.

42. (original) The method of claim 39, comprising the act of providing a vertical release mechanism to facilitate vertical release of the limb support from the lateral rail structure.

43. (canceled)

44. (original) The method of claim 43, wherein the act of providing a friction-based securement mechanism comprises the act of creating a holding force between the limb support and the receptor as a patient load is applied to the limb support.

45 - 49. (canceled)

50. (currently amended) A patient support system for a medical imaging system, comprising:

a lateral rail structure directly attachable to a receptor of the medical imaging system; and

a patient support movably coupled to the lateral rail structure via a rail guide structure, wherein the patient support comprises a plurality of hand grips.

51. (previously presented) The patient support system of claim 50, wherein the plurality of hand grips are disposed at different vertical positions.